Soil & Tillage Research, 22 (1992) 398–400
Elsevier Science Publishers B.V., Amsterdam

Contents of *Soil and Tillage Research*, Volume 22

VOL. 21 NOS. 1–2 **15 JANUARY 1992**

Effects of soil wetness at the time of land clearing on physical properties and crop response on an Ultisol in southern Nigeria
B.S. Ghuman (Ibadan, Nigeria) and R. Lal (Columbus, OH, USA) 1
Effect of seedbed condition on sowing point performance
J.A. Mead (Cowra, N.S.W., Australia), A.L. Palmer (Trangi, N.S.W., Australia) and K.Y. Chan (Rydalmere, N.S.W., Australia) 13
Effect of tillage and crop rotation on the surface stability and chemical properties of a red-brown earth (Alfisol) under wheat
K.R.J. Smettem, A.D. Rovira, S.A. Wace, B.R. Wilson and A. Simon (Glen Osmond, S.A., Australia) 27
Tractive device effects on soil physical properties
H.J. Brown (Burlington, VT, USA), R.M. Cruse, D.C. Erbach and S.W. Mevin (Ames, IA, USA) 41
The effect of tillage and gypsum application on the macropore structure of an Australian Vertisol used for irrigated cotton
M.R. Wild, A.J. Koppi, A.B. McBratney (Sydney, N.S.W., Australia) and D.C. McKenzie (Rydalmere, N.S.W., Australia) 55
Fallowing practices, soil water storage, plant-available soil nitrogen accumulation and wheat performance in South West Queensland
B.J. Radford (Biloela, Qld., Australia), G. Gibson (Warwick, Qld., Australia), R.G.H. Nielsen, D.G. Butler, G.D. Smith (Toowomba, Qld., Australia) and D.N. Orange (Indooroopilly, Qld., Australia) 73
Effect of tillage and N fertilization of a Solonetzic soil on barley production and some soil properties
S.S. Malhi (Lacombe, Alb., Canada), D.W. McAndrew (Vegreville, Alb., Canada) and M.R. Carter (Charlottetown, P.E.I., Canada) 95
Bio-reclamation of saline-sodic soil by Amshot grass in Northern Egypt
A.M. Helalia, S. El-Amir, S.T. Abou-Zeid and K.F. Zaghloul (Giza, Egypt) 109
The effects of design on the draught of undercutter-sweep tillage tools
K.C. Oni (Ilorin, Nigeria), S.J. Clark and W.H. Johnson (Manhattan, KS, USA) 117
Ten years of a maize/oats rotation under three tillage systems on a silt loam in New Zealand. 1. A comparison of some soil properties
D.J. Horne, K.A. Hughes (Palmerston North, New Zealand) and C.W. Ross (Lower Hutt, New Zealand) 131
A 10-year maize/oats rotation under three tillage systems. 2. Plant population, root distribution and forage yields
K.A. Hughes, D.J. Horne, J.F. Julian (Palmerston North, New Zealand) and C.W. Ross (Lower Hutt, New Zealand) 145
Effects of simplified cultivation on the growth and yield of spring barley on a sandy

loam soil. 1. Shoot growth and grain yield; response to nitrogen
M.A. Braim, K. Chaney and D.R. Hodgson (Leeds, UK) 159
Effects of simplified cultivation on the growth and yield of spring barley on a sandy loam soil. 2. Soil physical properties and root growth; root:shoot relationships, inflow rates of nitrogen; water use
M.A. Braim, K. Chaney and D.R. Hodgson (Leeds, UK) 173

Book Reviews
Terramechanics 188
Paleopedology 189
Arid and semi-arid environments 190
Advances in soil science 192
Soil erosion in Europe 193

Announcement 197

VOL. 22 NOS. 3–4 31 JANUARY 1992

Effect of organic and fertiliser treatments on soil physical properties and erodibility
E.I. Ekwue (Cranfield, UK) 199
Tillage influence on redox potentials following rainfall
D.E. Clay (Brookings, SD, USA), C.E. Clapp, D.R. Linden and J.A.E. Molina (St. Paul, MN, USA) 211
Quality of seedbed and ridges for potatoes as affected by low ground pressure, compared with normal and zero ground pressure
J.K. Kouwenhoven and R. Terpstra (Wageningen, Netherlands) 221
Compression characteristics of a clay soil as influenced by crops and sampling dates
J. Lafond, D.A. Angers and M.R. Laverdière (Sainte-Foy, Que., Canada) 233
Effect of stubble height and tillage on winter soil temperature in central Alberta
S.S. Malhi, M.K. Bhalla, L.J. Piening and C.D. Caldwell (Lacombe, Alta., Canada) 243
Ploughless tillage in Sweden. Results and experiences from 15 years of field trials
T. Rydberg (Uppsala, Sweden) 253
Stress distribution over a triangular tillage tool
C.P. Gupta (Bangkok, Thailand) and R.C. Maheshwari (Bhopal, India) 265
Residual effects of additions of calcium compounds on soil structure and strength
C.D. Grant, A.R. Dexter and J.M. Oades (Glen Osmond, SA, Australia) 283
Soil microbial population and nitrogen-transforming bacteria from 11-year sorghum tillage plots
G.K. Stearman and J.E. Matocha (Corpus Christi, TX, USA) 299
Surface clod size distribution as a factor influencing soil erosion under simulated rain
R. Ambassa-Kiki (Yaounde, Cameroon) and R. Lal (Columbus, OH, USA) 311
Soil biotic and biochemical factors in a long-term tillage and stubble management experiment on a vertisol. 1. Seedling inhibition by stubble
J.P. Thompson (Toowoomba, Qld., Australia) 323
Soil biotic and biochemical factors in a long-term tillage and stubble management experiment on a vertisol. 2. Nitrogen deficiency with zero tillage and stubble retention
J.P. Thompson (Toowoomba, Qld., Australia) 339

Effect of variation in tillage on weeds and groundnut establishment and yield in Rahad Project, Sudan
M.I. Dawelbeit and A.A. Hamada (El Fau, Sudan) 363
Effects of deep tillage and fertilization on soya yields in a compacted Ustochrept during seven cropping seasons, Santa Cruz, Bolivia
R.G. Barber and O. Díaz (Santa Cruz, Bolivia) 371

Short Communication
Effects of tillage and crop rotation on physical properties of a loam soil
C. Chang and C.W. Lindwall (Lethbridge, Alta., Canada) 383

Book Reviews
Soil micromorphology 391
Soil conservation 393
Agricultural engineering soil mechanics 394

Author Index 395